

Abstract Submitted
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A Gamma Ray Spectrometer Based on Mobile Phone Technology¹ KYLE MOSS, ALEXANDER BARZILOV, PHILLIP C. WOMBLE, JON PASCHAL, Western Kentucky University — We have developed a miniature spectrometer for gamma-ray detection and automatic isotope identification (RadPhone) which uses mobile phone technology to analyze the data and to distribute the results to security personnel. The RadPhone system consists of two modules, a detector module and wireless phone module. The detector module houses a detector, a small data acquisition system, Bluetooth transceiver, and power supply (battery). Using a Bluetooth channel, this module communicates to the MotorolaTM MPx220 wireless phone with data acquisition and analysis software which serves as a data acquisition computer. RadPhone offers a small, portable means of gamma-ray detection and identification.

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Kyle Moss
Western Kentucky University

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